WHAT IS CLAIMED IS:

Sub A1

1. A method executed by a programmable apparatus, comprising:

   a. receiving with a computer a data retrieval request from a graphical user interface (GUI) on a programmable user display device,

   b. in response to the retrieval request, accessing with a computer a plurality of digital databases and retrieving with a computer requested data from such databases,

   c. assembling with a computer an OLAP cube of the retrieved data, and

   d. displaying the OLAP cube to the user using the GUI.

2. The invention in claim 1, further comprising:

   a. accepting through the GUI a user update of specific data displayed from the assembled OLAP cube,

   b. accessing the database related to the specific data of the user update, and updating that data base with the specific data of the user update, and

   c. updating the assembled OLAP cube with the specific data update.

3. The invention in claim 1, further comprising:

   a. removing one database from the plurality of databases.

4. The invention in claim 1, further comprising:

   a. adding one database to the plurality of databases.

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5. The invention in claim 1, further comprising:

a. providing a plurality of access codes, each access code corresponding to a number of databases that may be accessed with the access code,

b. assigning each user an access code,

c. receiving and responding to a data access request only if the request is from a user with code authorizing access to all the databases with the requested data.

6. The invention in claim 1, further comprising:

a. providing a plurality of access codes, each access code corresponding to a number of databases that may be accessed with the access code,

b. assigning each user an access code,

c. updating data based on a data update request only if the request is from a user with code authorizing update to all the databases with the requested data.

7. The invention in claim 1, where:

a. the GUI is resident on a computer that communicates electronically through the Internet to a server, and

b. the server accesses the database, retrieves the data, assembles the OLAP cube, and transmits data from the OLAP cube through the Internet for display on the GUI.

8. The invention in claim 7, where the plurality of databases are local to the server and directly accessed by server.

9. The invention in claim 7, where the plurality of databases are resident remotely from the server and are accessed each through a remote database server with a native information system.

10. The invention in claim 1, where the databases include SQL databases, relational databases, object oriented databases, multi-dimensional databases and flat databases.

11. The invention in claim 1, where the plurality of databases are incompatible to each other.

12. The invention in claim 1, where the plurality of databases are compatible to each other.

13. The invention in claim 1, where the displaying step renders 3-dimensional visualizations of an entity.

14. The invention in claim 13, where the databases and 3-dimensional visualizations relate to an airplane.

15. The invention in claim 13, where the databases and 3-dimensional visualizations relate to an oil drilling and producing platform.

16. The invention in claim 13, where the databases and 3-dimensional visualizations relate to a geographic area.

17. The invention in claim 13 where the 3-dimensional visualizations comprise an orthographic view and a perspective view.

18. The invention of claim 13, where the 3-D visualizations provide access to data for a component of the entity by pointing and clicking on the 3-D visualizations of the component.

19. The invention of claim 1, where the databases contain data stored using one data format from the group comprising: photographic records, textual data, annotated engineering drawings, graphical plots and audio and videotaped records.

20. The invention of claim 1, where the databases are connected using one from the group comprising: OLE-DB technology and a native connection method to the databases.

21. The invention of claim 1, where the databases use a network topology that is one from the group comprising: a network topology managed by an operating system, and Internet protocols.

22. The invention of claim 1, where the displaying step increases and decreases data detail based on input from a user.

23. The invention of claim 1 where the displaying step provides drill-down capability.

24. The invention of claim 1 where the displaying step displays components of the entity according to a color-coding scheme.

25. The invention of claim 1 where the displaying step displays information according to a database pivot feature.

26. The invention of claim 1 where the retrieved data can be analyzed through tabulated trend analysis and graphical trend analysis.

27. The invention of claim 1 where data about the plurality of digital databases are stored in at least one serialized file, said method further comprising assembling a new virtual data warehouse based in part on at least one serialized file.

28. A data storage medium containing instructions programmed to perform a method, the method comprising:

a. receiving with a computer a data retrieval request from a graphical user interface (GUI) on a programmable user display device,

b. in response to the retrieval request, accessing with a computer a plurality of digital databases and retrieving with a computer requested data from such databases,

c. assembling with a computer an OLAP cube of the retrieved data, and

d. displaying the OLAP cube to the user using the GUI.

29. The invention in claim 28, further comprising:

a. accepting through the GUI a user update of specific data displayed from the assembled OLAP cube,

b. accessing the database related to the specific data of the user update, and updating that data base with the specific data of the user update, and

c. updating the assembled OLAP cube with the specific data update.

30. The invention in claim 28, further comprising:

a. removing one database from the plurality of databases.

31. The invention in claim 28, further comprising:

a. adding one database to the plurality of databases.

32. The invention in claim 28, further comprising:

a. providing a plurality of access codes, each access code corresponding to a number of databases that may be accessed with the access code,

b. assigning each user an access code,

c. receiving and responding to a data access request only if the request is from a user with code authorizing access to all the databases with the requested data.

33. The invention in claim 28, further comprising:

a. providing a plurality of access codes, each access code corresponding to a number of databases that may be accessed with the access code,

b. assigning each user an access code,

c. updating data based on a data update request only if the request is from a user with code authorizing update to all the databases with the requested data.

34. The invention in claim 28, where:

a. the GUI is resident on a computer that communicates electronically through the Internet to a server, and

b. the server accesses the database, retrieves the data, assembles the OLAP cube, and transmits data from the OLAP cube through the Internet for display on the GUI.

35. The invention in claim 34, where the plurality of databases are local to the server and directly accessed by server.

36. The invention in claim 34, where the plurality of databases are resident remotely from the server and are accessed each through a remote database server with a native information system.

37. The invention in claim 28, where the databases include SQL databases, relational databases, object oriented databases, multi-dimensional databases and flat databases.

38. The invention in claim 28, where the plurality of databases are incompatible to each other.

39. The invention in claim 28, where the plurality of databases are compatible to each other.

40. The invention in claim 28, where the displaying step renders 3-dimensional visualizations of an entity.

41. The invention in claim 40, where the databases and 3-dimensional visualizations relate to an airplane.

42. The invention in claim 40, where the databases and 3-dimensional visualizations relate to an oil drilling and producing platform.

43. The invention in claim 40, where the databases and 3-dimensional visualizations relate to a geographic area.

44. The invention in claim 40 where the 3-dimensional visualizations comprise an orthographic view and a perspective view.

45. The invention of claim 40, where the 3-D visualizations provide access to data for a component of the entity by pointing and clicking on the 3-D visualizations of the component.

46. The invention of claim 28, where the databases contain data stored using one data format from the group comprising: photographic records, textual data, annotated engineering drawings, graphical plots and audio and videotaped records.

47. The invention of claim 28, where the databases are connected using one from the group comprising: OLE-DB technology and a native connection method to the databases.

48. The invention of claim 28, where the databases use a network topology that is one from the group comprising: a network topology managed by an operating system, and Internet protocols.

49. The invention of claim 28, where the displaying step increases and decreases data detail based on input from a user.

50. The invention of claim 28 where the displaying step provides drill-down capability.

51. The invention of claim 28 where the displaying step displays components of the entity according to a color-coding scheme.

52. The invention of claim 28 where the displaying step displays information according to a database pivot feature.

53. The invention of claim 28 where the retrieved data can be analyzed through tabulated trend analysis and graphical trend analysis.

54. The invention of claim 28 where data about the plurality of digital databases are stored in at least one serialized file, said method further comprising assembling a new virtual data warehouse based in part on at least one serialized file.

55. A programmable apparatus comprising:

a. means to receive a data retrieval request from a graphical user interface (GUI) on a programmable user display device,

b. means to access, in response to the retrieval request, a plurality of digital databases and to retrieve requested data from such databases,

c. means to assemble an OLAP cube of the retrieved data, and

d. means to display the OLAP cube to the user using the GUI.

56. The invention in claim 55, further comprising:

a. means to accept through the GUI a user update of specific data displayed from the assembled OLAP cube,

b. means to access the database related to the specific data of the user update, and to update that data base with the specific data of the user update, and

c. means to update the assembled OLAP cube with the specific data update.

57. The invention in claim 55, further comprising:

a. means to remove one database from the plurality of databases.

58. The invention in claim 55, further comprising:

a. means to add one database to the plurality of databases.

59. The invention in claim 55, further comprising:

a. means to provide a plurality of access codes, each access code corresponding to a number of databases that may be accessed with the access code,

b. means to assign each user an access code,

c. means to receive and respond to a data access request only if the request is from a user with code authorizing access to all the databases with the requested data.

60. The invention in claim 55, further comprising:

a. means to provide a plurality of access codes, each access code corresponding to a number of databases that may be accessed with the access code,

b. means to assign each user an access code,

c. means to update data based on a data update request only if the request is from a user with code authorizing update to all the databases with the requested data.

61. The invention in claim 55, where:

a. the GUI is resident on a computer that communicates electronically through the Internet to a server, and

b. the server accesses the database, retrieves the data, assembles the OLAP cube, and transmits data from the OLAP cube through the Internet for display on the GUI.

62. The invention in claim 61, where the plurality of databases are local to the server and directly accessed by server.

63. The invention in claim 61, where the plurality of databases are resident remotely from the server and are accessed each through a remote database server with a native information system.

64. The invention in claim 55, where the databases include SQL databases, relational databases, object oriented databases, multi-dimensional databases and flat databases.

65. The invention in claim 55, where the plurality of databases are incompatible to each other.

66. The invention in claim 55, where the plurality of databases are compatible to each other.

67. The invention in claim 55, where the display means renders 3-dimensional visualizations of an entity.

68. The invention in claim 67, where the databases and 3-dimensional visualizations relate to an airplane.

69. The invention in claim 67, where the databases and 3-dimensional visualizations relate to an oil drilling and producing platform.

70. The invention in claim 67, where the databases and 3-dimensional visualizations relate to a geographic area.

71. The invention in claim 67 where the 3-dimensional visualizations comprise an orthographic view and a perspective view.

72. The invention of claim 67, where the 3-D visualizations provide access to data for a component of the entity by pointing and clicking on the 3-D visualizations of the component.

73. The invention of claim 55, where the databases contain data stored using one data format from the group comprising: photographic records, textual data, annotated engineering drawings, graphical plots and audio and videotaped records.

74. The invention of claim 55, where the databases are connected using one from the group comprising: OLE-DB technology and a native connection method to the databases.

75. The invention of claim 55, where the databases use a network topology that is one from the group comprising: a network topology managed by an operating system, and Internet protocols.

76. The invention of claim 55, where the display means increases and decreases data detail based on input from a user.

77. The invention of claim 55 where the display means provides drill-down capability.

78. The invention of claim 55 where the display means displays components of the entity according to a color-coding scheme.

79. The invention of claim 55 where the display means displays information according to a database pivot feature.

80. The invention of claim 55 where the retrieved data can be analyzed through tabulated trend analysis and graphical trend analysis.

81. The invention of claim 55 where data about the plurality of digital databases are stored in at least one serialized file, said method further comprising assembling a new virtual data warehouse based in part on at least one serialized file.